

Comparisons of Job Characteristics

Focus Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mechanical	6.8	9.5	17.0	>> Current knowledge level is likely more than sufficient
Engineering and Technology	5.7	6.4	9.1	>> Current knowledge level is likely more than sufficient
Design	5.2	6.0	11.2	>> Current knowledge level is likely more than sufficient
Building and Construction	4.0	4.9	16.6	>> Current knowledge level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Quality Control Analysis	5.9	7.4	8.7	> Skill level is likely sufficient
Troubleshooting	4.5	6.2	8.4	>> Skill level is likely more than sufficient
Equipment Maintenance	3.5	5.9	7.5	> Skill level is likely sufficient
Repairing	3.4	5.9	8.4	>> Skill level is likely more than sufficient
Equipment Selection	3.3	5.4	6.0	> Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.4	11.8	0	Current ability level may be sufficient
Near Vision	11.1	11.2	11.4	0	Current ability level may be sufficient
Manual Dexterity	6.5	10.3	10.6	0	Current ability level may be sufficient
Finger Dexterity	7.6	9.7	11.1	>	Current ability level is likely sufficient
Oral Expression	12.4	9.7	10.2	0	Current ability level may be sufficient
Oral Comprehension	12.5	9.6	11.2	>	Current ability level is likely sufficient
Control Precision	6.6	9.5	11.2	>	Current ability level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 78

Focus Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Work Activities	Exclusivity of Activity
Braze metal parts or components together	85
Compute production, construction, or installation specifications	58
Examine products or work to verify conformance to specifications	15
Fabricate, assemble, or disassemble manufactured products by hand	11
Identify base metals for welding	68
Maintain records, reports, or files	5
Move or fit heavy objects	8
Plan or organize work	51
Read blueprints	10
Read specifications	23
Read technical drawings	7
Solder metal parts or components together	73
Use acetylene welding/cutting torch	54
Use arc welding equipment	62
Use braze-welding equipment	92
Use combination welding procedures	68
Use hand or power tools	2
Use soldering equipment	44
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 80

Focus Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation: Welders, Cutters, Solderers, and Brazers (51-4121)

Tools and Technologies	Exclusivity
Aerial lifts	13
Bandsaws and accessories	26
Business function specific software	1
Cleaning equipment	11
Computer printers	2
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Cutting tools	18
Data management and query software	1
Electrical measuring and testing equipment	7
Face and head protection	7
Forming tools	2
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Metal bending and forming machinery	17
Passenger motor vehicles	13
Personal communication devices	2
Pneumatic tools	8
Power tools	2
Prying and bending tools	10
Rough and finishing tools	5
Soldering and brazing and welding machinery and supplies	6
Temperature and heat measuring instruments	6
Tool attachments and accessories	12
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.